FINAL

2006 ANNUAL SITE INSPECTION REPORT

BAILEY SUPERFUND SITE

Prepared by:

PARSONS

July 2006

Charles Keith Ganze
Keith Ganze, P.E.

80596
P.E. Number

27 JULY 2006
Date

TABLE OF CONTENTS

LIST OF APPENDICES

SECTION 1

1.0 INTRODUCTION

The annual inspection of the Bailey Superfund Site was conducted on May 18, 2006, by Parsons and this report summarizes the site conditions as of that date. Ms. Julie Larson of Parsons conducted the annual inspection in accordance with the Final Inspection, Maintenance, and Monitoring Plan (prepared by Parsons and GeoSyntec, September 1997).

Section 2 provides a narrative description of the 2006 annual inspection and Section 3 provides recommended actions. The inspection checklist used during the inspection of the site is included in Appendix A. The checklist was completed as the site was walked and observations were made. Photographs that were taken during the inspection are included in Appendix B.

SECTION 2

2.0 INSPECTION SUMMARY

Ms. Julie Larson of Parsons, the Bailey Site Settlors Committee's (BSSC) authorized consultant, conducted a visual inspection of the site on May 18, 2006. The inspection included a review of the condition of the engineered caps, vegetation, dike breaches, fences, signs, access-bridge, and on-site roads. The inspection checklist is provided in Appendix A. This section provides a summary of the inspection and findings. Photographs were taken during the inspection and are included in Appendix B of this report. Due to a camera malfunction, not all site photos were recovered; however, the photos presented in this report are deemed adequate to show the status of the site.

2.1 Site Access-Bridge Inspection

The access-bridge to the site was inspected and found to be in good condition. The bridge decking, handrails, and steel structure appear to be in good condition. The intersection of the off-site asphalt access road with the bridge decking is serviceable for site access.

2.2 Fence and Sign Inspection

The gates and locks were also inspected and found to be in good condition. The signs located around the perimeter of the site are generally in good condition. The sign located on the back gate on the East Dike Cap is missing and needs to be replaced (Photo 1). The fencing at the site was inspected and found to be in good condition.

Access to the Site is controlled entirely by the landowner who coordinates his Site obligations with the EPA. The inner bridge gate was unlocked and open at the time of the inspection; however, the outer perimeter gate was locked to prevent pedestrian and vehicle traffic from accessing the site.

2.3 Grounds Inspection

The North and East Dike Caps were inspected for erosion, differential settling, and ponding by traversing the surface area of each dike to identify any signs of problems that would affect the integrity of the landfill cap system. The site was mowed near the end of April 2006, approximately one month prior to the inspection. The last rainfall at the site occurred on May 13, 2006, a few days prior to the site inspection. During the six months prior to the annual inspection, precipitation fell at below normal rates for the Port Arthur area, which is 25 inches cumulative average for December through May (www.wunderground.com). Cumulative rainfall for December 2005 through May 2006 in the Port Arthur area was 13 inches.

In general, the caps and dikes appear to be in good condition. Vegetative growth on the caps looked healthy and indicates that rainfall was adequate during the prior months. Photos 2-4 in Appendix B illustrate the general conditions of the two caps.

The site was seeded and fertilized during December 2005 with a winter rye mix. Due to relatively mild winter conditions and adequate rainfall, the grass on the East and North Dike Caps is generally growing well. As noted in previous reports, the south end of the East Cap continues to shows signs of restricted growth, possibly related to the higher clay content found in topsoil placed in this area. In spite of the limited vegetative cover, erosion in this area is not a concern. Parsons will continue to monitor this area of the East Cap to ensure adequate coverage.

An area of approximately 300 feet along the northern edge of the North Dike Cap between the third and fifth gas vents has hay bales placed along the edge of the vegetation and rip rap as a means of erosion control (Photo 5). This method was used because the prior placement of hay bales in other areas along the dike successfully prevented further erosion and helped re-establish vegetative growth.

There are small animal burrows on both the East Dike Cap and North Dike Cap. The burrows are continually inspected and filled when discovered. There is no evidence of damage to the underlying geosynthetic material layer from the burrowing animals.

The gas vents were also inspected and found to be in good shape on both caps (Photo 6). The animal barriers installed around each gas vent on both caps effectively prevent animals from burrowing around the vents.

The caps were also inspected for desiccation and differential settlement. No areas of desiccation were noted during the site inspection in May 2006. Parsons will continue to monitor both caps for potential desiccation and differential settlement during future site visits.

2.4 Dike Breaches and Drainage Pipes

The dike breach in the North Marsh perimeter dike was inspected and found to be in good condition, allowing free flow of tidal waters. The culvert at the end of the East Dike Cap appeared to have been removed (Photos 7-9). A bent and partially demolished culvert was found on top of the ground outside the back gate and it appeared that soil had been used to fill the area where the culvert was removed. Section 2.2 of the September 1997 Final Inspection, Maintenance, and Monitoring Plan indicates that "... the breaches in the perimeter dikes will be inspected to ensure that there is free movement of water within the dike area." It appears that removal of this culvert may prevent the free movement of water. Parsons recommends that this be brought to EPA's attention so that EPA may follow up with the appropriate landowners to address this issue.

2.5 On-Site Road Inspection

The access roads for the North and East Dike Caps were inspected for signs of rutting, potholes, erosion, and accumulation of silt. All on-site roads were found to be in good condition.

2.6 Other Observations

The rip rap along the East Cap that previously shifted after Hurricane Rita last year has been raked (Photo 10) so that there is no longer a gap between the rip rap and the perimeter fence.

The caps at the Bailey Superfund Site are in good condition with healthy vegetative growth. No issues regarding the integrity of the engineered caps and surrounding site were found during the 2006 annual inspection.

SECTION 3

3.0 RECOMMENDED ACTION

The Bailey Superfund Site was found to be in good condition during the May 2006 Annual Site Inspection. There are no major areas of concern; however, minor issues that need to be addressed include:

- Replacing back gate signage;
- Monitoring vegetative growth on both caps during summer months to ensure that erosion is controlled;
- Continual monitoring and filling of animal burrows on both caps; and
- Seeding and fertilization with a winter rye mix in the fall.

Parsons will follow up with American Remediation Options (the site mowing and maintenance subcontractor) to ensure that the above issues are addressed.

BAILEY SITE INSPECTION CHECK LIST

Site Access Bridge

Are the following in good condition:

Wood Decking:	(Yes)	No
Hand Rails:	(Yes)	No
Approaches:	(Yes)	No
Bridge Steel Structure:	(Yes)	No

If No, describe the observed condition:

n/a

Road Inspection

Rutting	Yes	(No)	(If yes to any, provide location on map)
Potholes	Yes	(No)	
Erosion Channeling	Yes	(No)	
Accumulation of Silt	Yes	(No)	

Other General Site Observations:

- evidence of turtle nests on North Dike
- North Dike (hay bales - some movement due to rain drainage). Hay bales realigned during site visit
- Both caps have mostly healthy, full vegetation. There are some brown patchy areas on both caps. East Dike dog leg area - vegetation is growing but relatively sparse in that general area.

BAILEY SITE INSPECTION CHECK LIST

Summary of Problem Areas Identified

~~[illegible]~~

Need to monitor vegetation growth in patchy areas to ensure adequate vegetation.

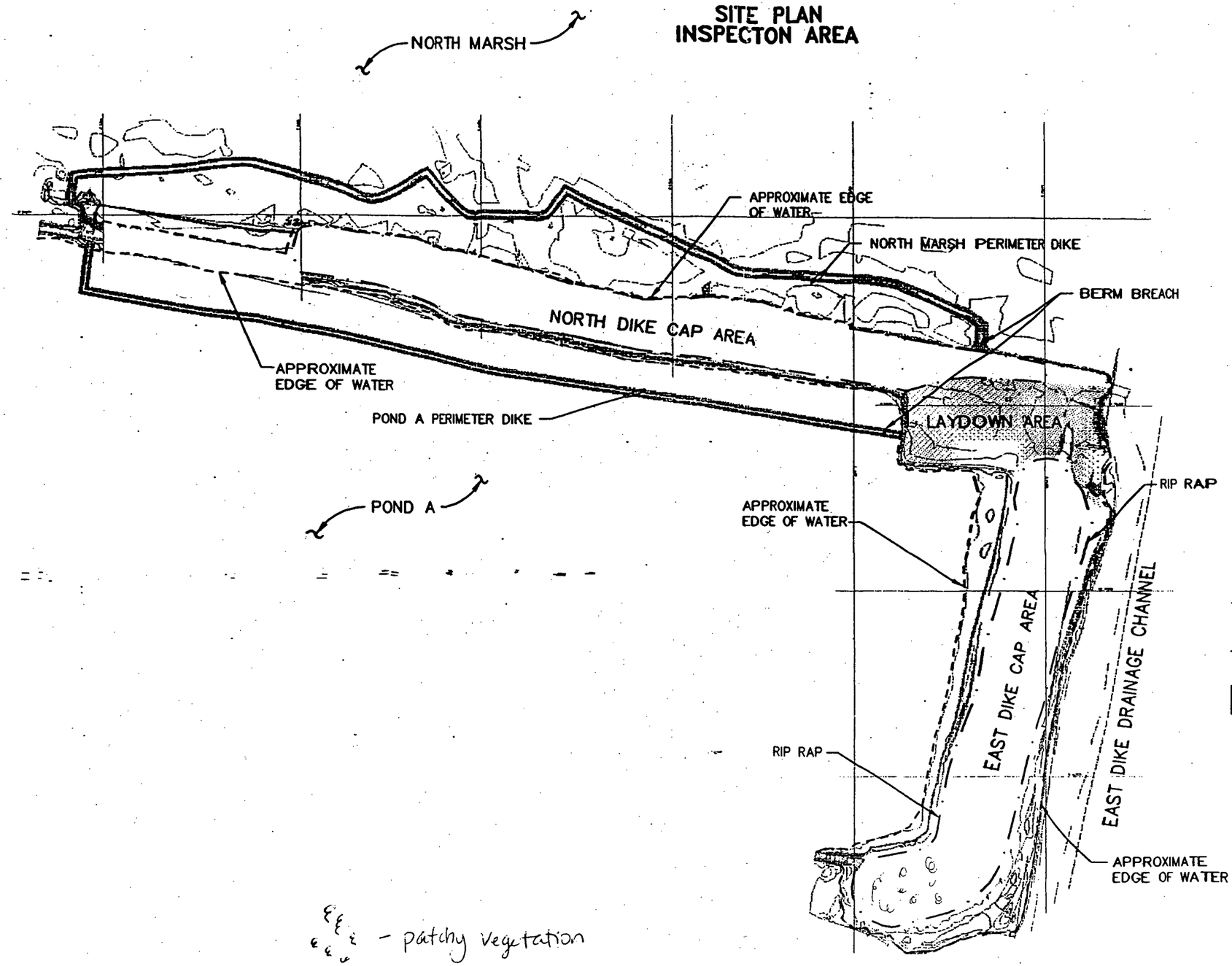
Continue to monitor animal burrows.

Monitor Pond A - drainage flow from East Cap to confirm if culvert removal is a problem.

Inspector's Signature

5/18/06
Date

SITE PLAN
INSPECTON AREA



NORTH

NOTES:

1. DRAWING BASED ON PREVIOUS SITE TOPOGRAGHIC INFORMATION AND DESIGN DRAWINGS. DRAWING IS NOT BASED ON FINAL AS-BUILT DATA.
2. LOCATION OF EDGE OF WATER SHOWN IS THE LOCATION AT THE TIME OF SURVEY. WATER LEVELS SUBJECT TO TIDAL VARIATIONS. AVERAGE TIDE ELEVATIONS ARE: LOW TIDE - -2.0 FEET (MSL) AND HIGH TIDE +1.0 FEET (MSL). TIDE ELEVATIONS ARE SUBJECT TO VARIATION DEPENDING ON SEASON AND LOCAL WEATHER CONDITIONS.
3. RIPRAP LOCATED ON ALL SLOPES.
4. INSPECTION AREA TO INCLUDE, AS A MINIMUM,
   - NORTH DIKE CAP AREA
   - EAST DIKE CAP AREA
   - ALL AREAS OF RIP RAP
   - VISUAL OBSERVATION OF PERIMETER DIKES
   - ACCESS BRIDGE
   - SITE FENCING (FIGURE 2.2)

LEGEND — GENERAL

EXISTING CONTOUR (FEET)

ANCHOR TRENCH

APPROXIMATE LIMIT OF GRAVEL SURFACING

0 300
SCALE IN FEET

~ ~ ~ - patchy vegetation

GeoSyntec Consultants
ATLANTA, GA

PROJECT NO. GE3913-620	FIGURE NO. 2.1
DOCUMENT NO.	FILE NO. 3913F004

APPENDIX B

SITE INSPECTION PHOTOGRAPHS – MAY 2006

Photo 1 – East Dike Cap back gate looking west

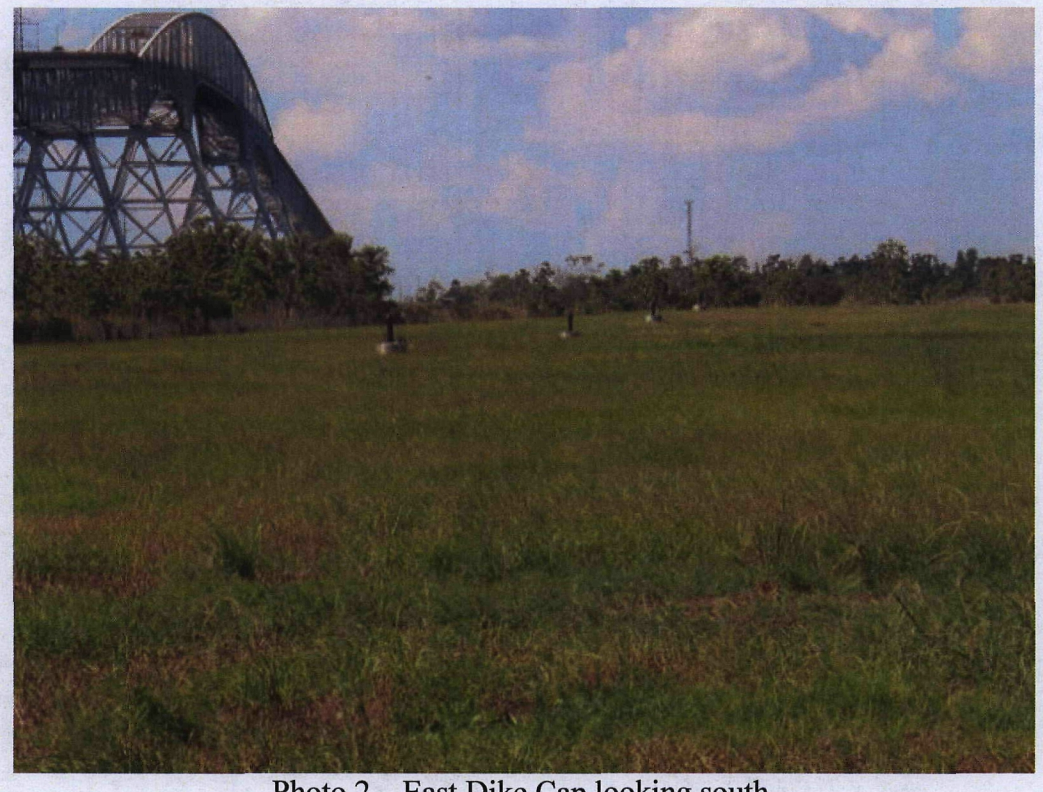


Photo 2 – East Dike Cap looking south.

Photo 3 – North Dike Cap looking west

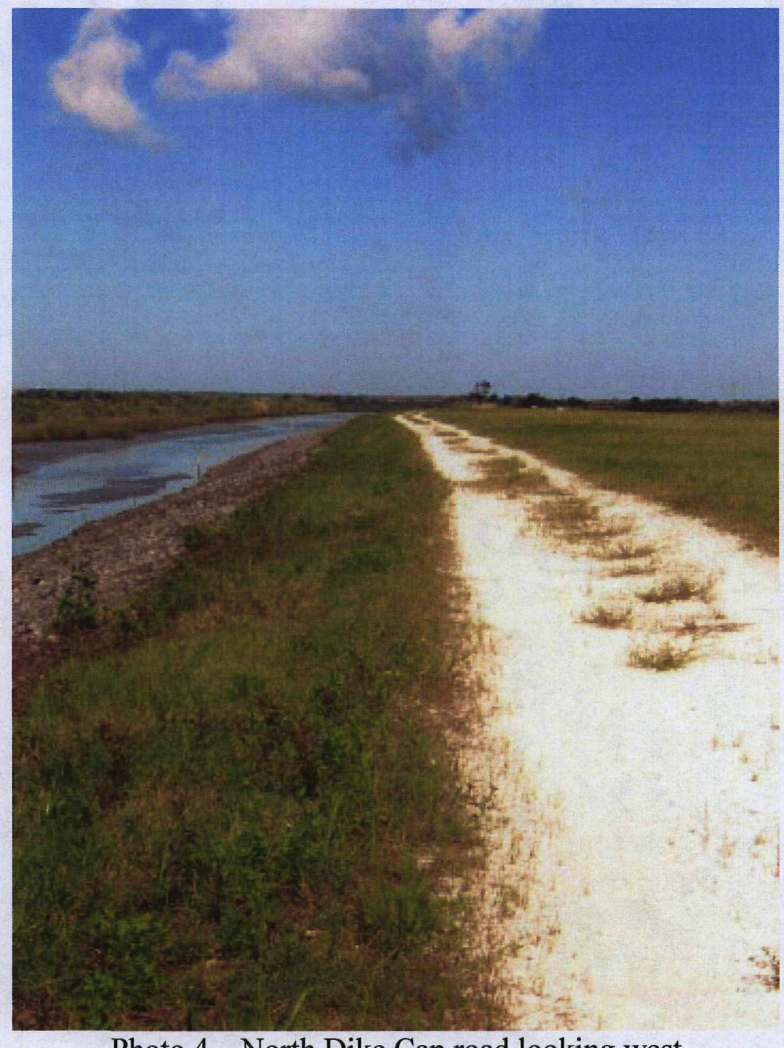


Photo 4 – North Dike Cap road looking west

Photo 5 – Hay bales along rip rap on North Dike Cap

Photo 6 – Gas Vent on North Dike Cap

Photo 7 – Culvert laying outside of East Dike Cap back fence

Photo 8 – New soil where culvert was removed (north side of road)

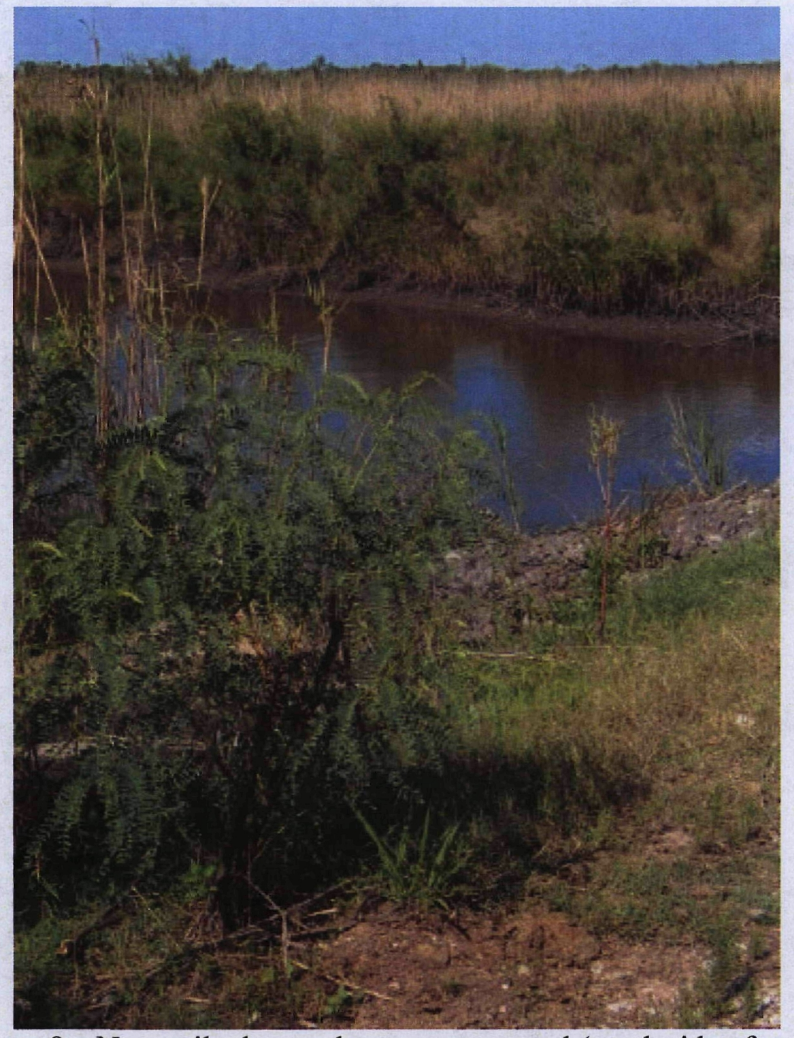


Photo 9 – New soil where culvert was removed (south side of road)

Photo 10 – Raked rip rap along East Dike Cap (no gaps between fence and rip rap)